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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/576,237 | 04/18/2006 | **Kazuya Otani** | 2842.44US01 | 7211 |

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| EXAMINER | |
|---|---|
| PARRIES, DRU M | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2836 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/576,237 | OTANI ET AL. | |
| | Examiner | Art Unit | |
| | DRU M. PARRIES | 2836 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-7* is/are rejected.

7)☒ Claim(s) *3,8 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed November 11, 2008 have been fully considered but they are not persuasive. Regarding the limitation of claim 1 and amended into claim 7, while Kokuryo may not have the detection means being output directly to the holding means, Nagae (the main reference) teaches the detection means (32) being directly output to the holding means (16). Therefore, with Kokuryo teaching a holding means that holds a voltage that is input into it at that corresponding voltage, the modification would lead to Nagae's holding means holding the voltage sent via the detection means (32) at the same voltage as that of the detection means signal. Therefore, the Examiner believes that Nagae and Kokuryo do teach claim 1 and amended claim 7.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagae et al. (2004/0004397) and Kokuryo et al. (2007/0138868). Regarding claims 1, 4, 6, and 7, Nagae teaches a steering lock mechanism comprising a latch member (34) movable to be engaged with (lock state) and disengaged from (unlock state) the socket in the steering shaft (3), drive means (33) for driving the latch member, a detection means (32) powered by a battery for detecting at least one of the operation states of the steering lock mechanism and for outputting a detection signal when shifting to the at least one of the operation states is completed, and a state holding means (16) for outputting a completion signal indicating that shifting to one of the operation states has been completed in accordance with the detection signal. Nagae also teaches when the steering lock mechanism is in the unlock state, the detection means continuously provides an unlock detection signal at a voltage of +B to the state holding means. Nagae also teaches the detection means could be a non-contact unlock sensor.

Nagae fails to explicitly teach the state holding means (16) generating a hold signal held at a voltage that is the same as that of the detection signal. Kokuryo teaches a holding circuit comprising a booster circuit (capacitor) that holds an input voltage at the corresponding voltage ([0067]). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a booster circuit into a hold circuit of Nagae's state holding means to be able to maintain a hold signal in regards to the operation state of the steering lock mechanism in the case where the power source is interrupted, the hold signal will be able to still notify the system for some time after the interruption as to the state of the mechanism.

Regarding claim 2, Nagae teaches the detection means outputting an unlock detection signal when the steering lock mechanism detects the unlock state and the state holding means holds the hold signal at a voltage corresponding to the unlock detection signal and outputs an unlock completion signal when the unlock detection signal, from the detection means, has the voltage indicating the unlock state (+B).

Regarding claim 4, Nagae fails to explicitly teach an OR circuit in his state holding means, nor does he explicitly teach how a completion signal is output. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement an OR circuit into Nagae's state holding means to output the completion signal, since using logic gates in a control system is known in the art and using an OR circuit for outputting an H level signal (i.e. completion signal) when at least one of the hold signal and the detection signal has an H level is a simple substitution of one known, equivalent method for the one in Nagae to obtain a predictable result of outputting a completion signal when one of the above signals is detected. In other words, based on the teachings in Nagae as to when a completion signal will be output, it would have been obvious to one of ordinary skill in the art to substitute an OR circuit into the state holding means to accomplish the same outcome.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagae et al. (2004/0004397) and Kokuryo et al. (2007/0138868) as applied to claims 1 and 4 above, and further in view of Staudt et al. (2002/0074858). Nagae and Kokuryo teach a steering lock mechanism as described above. They fail to explicitly teach the hold circuit comprising a flip-flop. Staudt teaches a hold circuit comprising a flip-flop for storing the operational state of a vehicle's electrical system (Abstract). Because both Kokuryo and Staudt teach methods for

maintaining a hold signal regarding the operational state of an electrical system, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute one method for the other to achieve the predictable result of holding the detection signal.

***Allowable Subject Matter***

6. Claims 3, 8, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the references of record, either alone, or in combination, do not teach or suggest at least the limitations of: the independent claims along with the control circuit providing a state hold command to the state holding means/hold circuit in response to the unlock detection signal as claimed in claims 3 and 8. Claim 9 is dependent upon claim 8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on M-Th from 9:00am to 6:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry, can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

1-6-2009

/Stephen W Jackson/

Primary Examiner, Art Unit 2836